

Emergency Support Function #12 – Energy

ESF Coordinator:

Tucson Office of Emergency Management
& Homeland Security

Support Agencies:

Planning & Development Services Dept.
General Services Department
Communications Division
Facilities Management Division
Tucson Water Department
Transportation Department
El Paso Natural Gas Co. Pipeline
Southwest Gas
Tucson Electric Power

Primary Agency:

Tucson Office of Emergency Management & Homeland Security

Purpose

The purpose of ESF #12 is to maintain liaison with public utilities providing services in the City of Tucson and to coordinate the continued operations of public utilities necessary to provide essential services to Tucson citizens, businesses, and governments.

Scope

The scope of ESF #12 includes the various utilities that provide services to the citizens of Tucson. The types of public and private utilities providing services in Tucson are electric, water, sewer, telephone, television, radio, pager, and cable services. The electric utilities, which include the Tucson Electric Power Company, are an organized collection of public and private generating, transmission, and distribution facilities. Relying on the power pool concept, the electric power industry has developed the capability to provide power even under the most extreme conditions.

Water supply and sewer systems within Tucson and Pima County are both publicly and privately owned, and are organized at either municipal or special purpose district level.

Natural gas is provided by the Southwest Gas Company. Distribution of natural gas is subject to control by the federal government in response to such factors as supply and areas of excessive demand. El Paso Natural Gas also is a provider.

Telephone service is provided by US Qwest, U.S. Sprint, and MCI (Now Verizon).

Cable service is provided by Cox Cable and Comcast.

Miscellaneous common carriers located in Tucson provide cellular service and paging services.

Energy support includes communicating with providers, coordinating restoration strategies, and reviewing emergency plans.

Potential operations include:

- Coordinating restoration plans
- Implementing rationing measures
- Allocating fuel resources
- Coordinating delivery schedules with wholesale providers
- Locating supplemental resources and arranging for distribution or delivery
- Participating in damage assessment operations.

Situation

Emergency/Disaster Conditions and Hazards

A significant emergency or disaster may severely damage and limit access to the utilities infrastructure in Tucson and the region as we know it today.

Planning Assumptions

- The City's support of the response to an emergency or disaster event may be severely impacted. No guarantee of a perfect response system is expressed or implied by the City of Tucson Emergency Operations Plan or this ESF. The City of Tucson can only endeavor to make every reasonable effort to respond based on the situation, information, and resources available at the time of the disaster
- Specific resources may be exhausted due to the impacts of disasters. Extraordinary measures may have to be taken in order to re-supply City departments
- The normal forms of communication and utilities may be severely interrupted during the early phases of an emergency or disaster
- Transportation to affected areas may be cut off or delayed because of damage to roads, bridges, airports, and other transportation means
- Following an emergency or disaster, there may be a need to provide utilities, resources, goods, and services to the affected areas
- Fundamental resources such as water, food, electricity, first aid, shelter, and sanitation supplies, fuels, and hand tools may be needed. Tucson does not have sufficient supplies and equipment on hand for long-term use
- Disaster response and recovery may be limited by the inability of the general citizenry to be self-sufficient for more than three days without additional supplies of food, water, medical, and shelter resources
- There may be delays in all normal services such as police, fire, emergency medical services, public works, transportation, and water/sewer and utilities response due to damage to facilities and equipment and shortages of personnel
- There may be shortages of critical drugs and medicines at medical facilities due to limited storage capacities
- The management and logistics of resource support is highly situational and is dependent upon the event, resource accessibility, transportation systems available, and location of vendors and suppliers

Concept of Operations

General

When the City of Tucson Emergency Operations Center (EOC), and/or the Pima County EOC, is activated for emergencies or disasters, it will be the focal point for the establishment of priorities for restoration of distribution utilities across the geographical “region” of the City and/or County. These priorities are established through coordination with the private and public utility providers. If needed, the establishment of emergency measures to curtail and ration utility services will be decided in the Emergency Operations Center. Depending upon the utility outage, both private and public utility purveyors will be invited to work in the EOC to expedite restoration of utility services. The EOC will coordinate with utilities and provide them with situation and damage reports to facilitate the return to service of utilities as soon as possible.

The City of Tucson will expend available resources (including mutual aid and private sector procurement), and proclaim an emergency prior to seeking assistance through the Pima County EOC.

When the requirement for coordinated use and mobilization of public utility resources is necessary to City government operations and for the protection of life and property, the City Manager will appoint the Tucson Office of Emergency Management & Homeland Security to act as the City Utility Coordinator.

The City Utility Coordinator will be the City liaison with public and private utilities not directly under the control of a county or state government agency, and will direct emergency utility services for the City from the City Emergency Operations Center under the supervision of the EOC Chief.

The City Utility Coordinator will initiate and maintain an information program through the Joint Information Center (JIC) to keep the public and utilities informed of utility services restrictions and requirements.

All utilities, whether publicly or privately owned, will be expected to manage and operate the utility within their own jurisdiction, providing emergency services based on requirements and capabilities.

Public utility resources will be used to meet immediate and essential emergency needs. If adequate resources are not available locally, request for additional resources will be made to the Pima County Emergency Operations Center (EOC). Requests for public utility resources that cannot be filled locally will be forwarded through emergency management channels to the state government.

To the maximum extent practicable, and within the limitations imposed by either the state or federal government, public and private utility systems will continue to provide service through their normal means. If curtailment of service is required, the systems will comply with such curtailment.

The Tucson Department of Transportation will issue permits for utility work on City road right of ways. They will include review for compliance with local codes and state statutes through inspections, review of designs, and construction management.

It is essential that underground utility locating services be included in any construction/restoration projects prior to the onset of excavation.

Comprehensive Emergency Management

Preparedness

ESF #12 primary and support agencies are responsible for ensuring that the following preparedness items are fully addressed:

- Review and revise their Standard Operating Procedures (SOPs)/Standard Operating Guidelines (SOGs)/Field Operating Guides (FOGs) regularly
- Establish procedures for alerting their own personnel and other key employees in an Incident of Local or Regional Significance
- Update equipment and resource listings on a regular basis, and distribute them appropriately
- Revise mutual aid agreements as needed
- Train employees on specific ESF functions
- Regularly attend scheduled tabletop exercises and all other applicable training events
- Review and analyze lessons learned in emergency/disaster incidents that have occurred elsewhere, and make appropriate corrections/additions to their respective SOPs/SOGs and this ESF

Response

ESF #12 primary and support agencies are responsible for ensuring that the following response items are fully addressed:

- Establish and maintain contact with the Incident Commander and/or appropriate Emergency Operations Center (EOC) for instructions
- Maintain ongoing information exchange with ESF #5 - Emergency Management
- Maintain complete and accurate documentation of all related costs, actions, and communications

Recovery

ESF #12 primary and support agencies are responsible for ensuring that the following recovery items are fully addressed:

- Consult with ESF #5 - Emergency Management and ESF #14 - Long-term Mitigation and Recovery regarding needed recovery strategy
- Assess losses of equipment and personnel, develop estimates of monetary loss, and identify possible funding sources
- Assess the need for critical incident stress management for personnel

Mitigation/Prevention

ESF #12 primary and support agencies are responsible for ensuring that the following mitigation/prevention items are fully addressed:

- Conduct threat, risk, and vulnerability assessments of key ESF infrastructure
 - Review and analyze lessons learned in emergency/disaster incidents that have occurred elsewhere, and make changes where applicable
 - Replace equipment, vehicles and/or personnel
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Responsibilities

Coordinating and Primary Agency: Tucson Office of Emergency Management & Homeland Security

The City of Tucson Office of Emergency Management & Homeland Security is responsible for liaison with public and private utilities in an Incident of Local or Regional Significance. Other specific responsibilities are as follows:

- Pre-incident planning and coordination
- Manage the financial aspects of the ESF #12 response, including the funding of mission assignments and/or reimbursable agreements
- Maintain ongoing contact with ESF primary and support agencies
- Conduct periodic ESF meetings and/or conference calls
- Coordinate ESF activities relating to Incidents of Local or Regional Significance, catastrophic incident planning, and critical infrastructure preparedness, as appropriate
- Coordinate training and strategies with the appropriate local, regional, state or federal agencies

Support Agencies

Agency	Functions
Planning & Development Services Department	<ul style="list-style-type: none"> • Provide technical expertise in determining emergency operations required for the restoration of the City's energy/utility services.
General Services Department	<p>Communications Division</p> <ul style="list-style-type: none"> • Maintain the City of Tucson's intranet , and fiber and radio networks <p>Facilities Management Division</p> <ul style="list-style-type: none"> • Provide for the maintenance and restoration of those utility systems on City-owned property for which the City is normally responsible • Maintain a list with specifications of movable emergency generators supporting City facilities • Relocate, hookup, and maintain portable generators as directed by ESF Coordinator • Maintain City fueling stations and storage facilities
Tucson Water Department	<ul style="list-style-type: none"> • Provide technical engineering expertise in determining emergency operations required for the restoration of the City's water supply • Provide personnel and heavy equipment for the restoration of the water system infrastructure
Transportation Department	<ul style="list-style-type: none"> • Provide staffing and equipment necessary to ensure public and private utilities compliance with local codes and state statutes through inspections, review of designs, and construction management
El Paso Pipeline Company	<ul style="list-style-type: none"> • Provide technical engineering expertise in determining emergency operations required for the restoration of the pipeline services into and out of the City • Provide personnel and heavy equipment for the restoration of the pipeline system infrastructure
Southwest Gas	<ul style="list-style-type: none"> • Provide technical engineering expertise in determining emergency operations required for the restoration of the City's natural gas services • Provide personnel and heavy equipment for the restoration of the natural gas system infrastructure
Tucson Electric Power Company	<ul style="list-style-type: none"> • Provide technical engineering and operations expertise in determining emergency operations required for the restoration of the City's electrical services • Provide personnel and heavy equipment for the restoration of the electrical distribution system infrastructure